United States Coast Guard Atlantic Area / Pacific Area

# Addendum for Uninspected Passenger Vessels over 100 GTs but less than 300 GTs that carry not more than 12 passengers for hire



Addendum to LANT/PACAREAINST 16710.2 Enclosure (1)

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#### INTRODUCTION

#### Overview

This document applies to U.S. uninspected passenger vessels (UPVs) over 100 Gross Tons that do not carry freight for hire. It has been developed to assist UPV owners and operators as well as Coast Guard marine inspectors and boarding officers during dockside or at-sea examinations of UPVs over 100 GTs. It is not meant to replace the federal regulations. For precise language and exemptions to various regulations, it is recommended that Title 33, Code of Federal Regulations (CFR), Title 46, Code of Federal Regulations Subchapter C and other CFRs, which set forth minimum requirements for UPVs, be consulted. UPV operators must meet Coast Guard licensing requirements as well.

Each section corresponds to the UPV Safety Exam Booklet, enclosure (2) of LANT/PACAREAINST 16710.2. The exam booklet is designed to be used with this addendum.

This document is designed to work with Requirements for Uninspected Passenger Vessels, enclosure (1) of LANT/PACAREAINST 16710.2.

All the requirements for UPVs apply as modified by this Addendum.

**Abbreviations** Listed are abbreviations found in this document:

CFR: Code of Federal Regulations

CG: U. S. Coast Guard

GT: Gross Tons

OCMI: USCG, Officer-in-Charge Marine Inspection

UPV: Uninspected Passenger Vessel

USC: United States Code

#### **Copy of Regulations**

For more detailed information contact the local Sector or Marine Safety Unit Prevention Department (Attn: Inspection Division) where you will be operating. You may purchase a copy of these regulations by calling the Government Printing Office at (202) 512-1800 or order by facsimile and credit card at (202) 512-2233. Request 46 CFR Parts 1 to 40, or to view online: http://www.gpoaccess.gov/index.html

#### **Penalties**

In accordance with 46 USC 4106, if an UPV over 100 GTs is operated in violation of applicable laws and regulations, the owner, chaterer, managing operator, agent, individual in charge, and master are each liable for criminal or civil penalties. The UPV over 100 GTs is liable *in rem* for the penalty.

#### **DEFINITIONS**

#### Consideration

An economic benefit, inducement, right, or profit including monetary payment going to an individual, person, or entity, but not including a voluntary sharing of the actual expenses of the voyage, by monetary compensation of fuel, food, beverage, or other supplies. 46 USC 2101 (5a)

#### **Passenger**

Any person on a vessel, other than the owner or an individual representative of the owner or in the case of vessel under charter, an individual charterer or individual representative of the charterer, master and the members of the crew, or other any other person employed or engaged in any capacity on board a vessel in the business of that vessel. 46 USC 2101 (21)

### **Passenger for Hire**

Passenger for whom a consideration is contributed as a condition of carriage whether directly or indirectly flowing to the owner, charterer, operator, agent, or any other person interested in the vessel is a passenger for hire. 46 USC 2101 (21a)

### **Uninspected Passenger Vessel (UPV)**

A vessel not subject to inspection by the Coast Guard under 46 USC 3301, less than 100 GTs:

- a. Carrying no more than six passengers, including at least one passenger for hire, or
- b. Chartered with the crew provided by the owner or owner's representative, and carrying six or fewer passengers. 46 USC 2101(42)(B)

#### Uninspected Passenger Vessels of at Least 100 Gross Tons (12 PACKS) -

A vessel not subject to inspection by the Coast Guard under 46 USC 3301, of at least 100 gross tons, but less than 300 gross tons:

- Carrying not more than 12 passengers, including at least one passenger for hire;
- Or chartered with the crew provided or specified by the owner and carrying not more than 12 passengers,
- ♦ That does not carry freight for hire.

These vessels are not afforded the exemption for an individual charterer under the definition of passenger unless, the owner transfers operational control of the vessel via a written agreement to the charterer. In other words, 12-packs do not become 13-packs.

### Requirements

All requirements specified for UPVs (6-packs) in LANT/PACAREAINST 16710.2, enclosure (1), as modified, supplemented, or amended by this enclosure.

#### PERSONNEL LICENSING

#### **Licensed Operators for UPVs**

Every UPV must be under the direction and control of a licensed master, pilot, or mate as appropriate. 46 CFR 15.605

Operate, operating, or operation, as applied to vessels, refers to a vessel anytime passengers are embarked whether the vessel is underway, at anchor, made fast to shore, or aground. 46 CFR 10.107

Underway means that a vessel is not at anchor, made fast to the shore, or aground. 46 CFR 10.107

The intent is that the vessel must be under the physical control or direct supervision of a licensed individual. It has been suggested by some operators that a qualified seaman could be left at the helm while the licensed operator sleeps close by. This position is untenable. 46 USC 8903 mandates the vessel be operated by a licensed individual; the Coast Guard does not nave the discretion to allow any unlicensed seaman to control the vessel without supervision.

#### Master

There must be an individual holding an appropriate license as master in command of every uninspected passenger vessel of at least 100 GT.  $46 \ CFR \ 15.805 \ (a)(6)$ 

An individual holding a license as master or pilot of an inspected, self-propelled vessel is authorized to serve as master of a UPV of at least 100 GTs within any restriction, **including gross tonnage** and **route**, on the individual's license. 46 CFR 15.905(b)

#### **UPVs 100GT to 199GT**

Current uninspected passenger vessel regulations (46 CFR Subchapter C) apply to these vessels as well as the manning provisions as specified below.

Uninspected passenger vessels of at least 100 gross tons carrying not more than 12 passengers shall be manned similarly to Subchapter T vessels.

#### PERSONNEL LICENSING (CONTINUED)

Uninspected Passenger Vessel licensing shall apply. This means that all individuals presently licensed as Operator Uninspected Passenger Vessel (OUPV) may also operate on vessels:

- ◆ Of between 100 and 199 gross tons on ocean or coastwise routes while carrying 12 passengers or less; and
- ♦ Of at least 100 gross tons on other than ocean or coastwise routes while carrying 12 passengers or less. *NVIC* 7-94

#### UPVs 200GT to 300GT

The complement of officers and crew on uninspected passenger vessels of at least 200 gross tons and operated on ocean or coastwise routes shall be similar to Subchapter T vessels. However, **the licensed officers must have licenses for the appropriate tonnage**. Additionally, the **crewmembers** on vessels (except vessels operated on only rivers and lakes) of at least 200 gross tons are required to hold *merchant mariner documents* and 50% of the unlicensed deck crew must be rated as at least able seaman.

If the machinery arrangement and means of machinery control so warrant, the OCMI may consider a **licensed engineer** for vessels of at least 200 gross tons. *NVIC* 7-94

#### Licenses

Each licensed individual employed on a UPV of at least 100 GTs shall have his or her license on board and available for examination at all times when the vessel operating. 46 CFR 185.402

### **CREW REQUIREMENTS**

#### **Crew Training**

The owner, charterer, master, or managing operator shall instruct each crew member, upon first being employed and prior to getting underway for the first time on a particular vessel and at least once every three months, as to the duties that the crew member is expected to perform in an emergency including, but not limited to, the emergency instructions listed on the emergency instruction placard and the duties listed in the station bill.

Training conducted on a sister vessel may be considered equivalent to the initial and quarterly training requirements contained in the above paragraph.

Crew training shall be logged or otherwise documented for review by the Coast Guard upon request. The training entry shall include the following information.

- ♦ Date of the training; and
- ◆ General description of the training topics. 46CFR 185.420

#### **Language Requirements**

The provisions of 46 USC 8702 relating to language applies generally to vessels of at least 100 GTs, except vessel operation on rivers and lakes.

75% percent of the crew in each department on board is able to understand any order spoken by the officers.

The words able to understand any order spoken by the officers relates to any order to a member of the crew when directing the performance of that person's duties and orders relating to emergency situations such as used of response to a fire or in using lifesaving equipment. It is not expected that a member of the deck department understand terminology normally used only in the engine room or vice versa.

46 CFR 15.730

#### **CREW REQUIREMENTS (CONTINUED)**

#### Watchmen and Fire Patrolmen

The owner, charterer, master, or managing operator of a vessel carrying overnight passengers shall have a suitable number of watchmen patrol throughout the vessel during the nighttime, whether or not the vessel is underway, to guard against, and give alarm in case of, a fire, man overboard, or other dangerous situation. 46 CFR 185.410 / 15.855

On vessels carrying passengers at night, the master or person in charge shall ensure that a suitable number of watchmen are in the vicinity of the cabins or staterooms and on each deck, to guard against and give alarm in case of fire or other danger.

For the watchmen the owner or operator of an uninspected passenger vessel not more than 300 gross tons may substitute the use of fire detectors, heat detectors, smoke detectors, and high-water alarms with audible- and visual-warning indicators, in addition to other required safety alarms, only when each of the following conditions are met:

- ◆ Fire detectors are located in each space containing machinery or fuel tanks. 46 CFR 181.400(c)
- ♦ All grills, broilers, and deep-fat fryers are fitted with a grease extraction hood. 46 CFR 181.425
- ♦ Heat and/or smoke detectors are located in each galley, public accommodation space, enclosed passageway, berthing space, and all crew spaces.
- ♦ High-water alarms are located in each space with a through hull fitting below the deepest load waterline, a machinery space bilge, bilge well, shaft alley bilge, or other space subject to flooding from sea water piping within the space, and a space below the waterline with non-watertight closure such as a space with a non-watertight hatch on the main deck.
- ♦ Each alarm has an audible- and visual-alarm indicator located at the normal operating station and, if the normal operating position is not continually manned and not navigating underway, in an alternate location that must provide the crew, and may at all times provide the passengers, immediate warning of a hazardous condition.

## **CREW REQUIREMENTS (CONTINUED)**

#### **Watchmen and Fire Patrolmen**

♦ The vessel is underway for no more than 12 hours in any 24-hour period, and the master of the vessel has chosen to operate with less than a three-watch system.

46 CFR 15.855(a)(c)

#### WATCHSTANDING

#### Watches.

Title 46 U.S.C. 8104 is the law applicable to the establishment of watches aboard certain U.S. vessels. The establishment of adequate watches is the responsibility of the vessel's master. The Coast Guard interprets the term watch to be the direct performance of vessel operations, whether deck or engine, where such operations would routinely be controlled and performed in a scheduled and fixed rotation. The performance of maintenance or work necessary to the vessel's safe operation on a daily basis does not in itself constitute the establishment of a watch. 46CFR15.705

#### Two-watch system.

Properly manned uninspected passenger vessels of at least 100 gross tons--

- (1) Which are underway for no more than 12 hours in any 24-hour period, and which are adequately moored, anchored, or otherwise secured in a harbor of safe refuge for the remainder of that 24-hour period may operate with one navigational watch;
- (2) Which are underway more than 12 hours in any 24-hour period must provide a minimum of a two-watch system;
- (3) In no case may the crew of any watch work more than 12 hours in any 24-hour period, except in an emergency. 46 CFR 15.705

#### Lookouts

The requirements for the maintenance of a proper lookout are specified in Rule 5 of the International Regulation for Preventing Collisions at Sea, 1972, and Rule 5 of the Inland Navigational Rules Act of 18980 (33 USC 2005). Lookout is a function to be performed by a member of a navigational watch. *46 CFR 15.850* 

#### LOAD LINES

#### **Applies to:**

U.S. documented vessels, which engage in foreign voyages/international voyages, domestic voyages (coastwise and intercostal voyages) that are;

- greater than 79 feet, and
- greater than 150 gross tons.

Vessels engaged exclusively in voyages on waters within the U.S. or its possessions and which are determined not to be "coastwise" or Great Lakes" voyages are exempt.

All exempt vessels greater than 79 feet and more than 150 gross tons must be issued a load line exemption certificate in lieu of a load line certificate. 46 CFR 42.03-5

#### **Authority:**

The authority requiring certain vessels to have and display load line marks indicating the maximum amidships draft to which such vessels may be safely loaded and certification thereof by the assigning authority is 46 USC 5101-5116.

#### Marks to indicate load lines:

Load line marks to indicate the maximum amidships' draft to which a vessel can be lawfully submerged, in the various circumstances and seasons, shall be permanently marked on each side of the vessel. 46 CFR 42.07-5

#### **Load line certificates:**

U.S. documented vessels will have a load line certificate issued by the Commandant U.S. Coast Guard, the American Bureau of Shipping, or a recognized classification society.

The load line certificate shall certify to the correctness of the load line marks assigned to the vessel and the vessel is in compliance with applicable requirements. A certificate

### **LOAD LINES (CONTINUED)**

issued shall describe the applicable load line marks, conditions, restrictions, and/ or exemptions, if any, the vessel shall observe, according to the season of the year and zone or areas in which the vessel may operate. The certificate shall certify the special conditions the vessel shall observe. 46 CFR 42.07-45

#### **Certificate on board:**

Each vessel subject to load line requirements shall carry on board a valid certificate attesting to compliance with the requirements.

The master of the vessel for which a load line certificate has been issued shall be responsible for the maintenance of the certificate on board the vessel and for compliance with its terms and conditions.

Additionally, the master shall be responsible for having the current load line survey report on board the vessel. 46 CFR 42.09-1

#### Logbook entries:

The master is responsible for having entered in the vessel's "official logbook" if carried, otherwise in his own log, the data required below. These logbook entries shall be made before a vessel departs from her loading port and consist of;

- ♦ A statement of the load line marks applicable to the voyage; and
- ◆ A statement of the position of the load line marks, port and starboard, at the time of departing from a port or place; i.e. the distance in inches of the water surface above or below the applicable load line; and
- ◆ The actual drafts, forward and aft, as accurately as possible, when departing from a port or place.
- ♦ Where the master uses his own log, the master or owner shall keep it for 1 year after the actions noted have been completed. The log shall make them available to any load line enforcement officer. 46 CFR 42.07-20

#### **COMMUNICATIONS**

#### **Applies To:**

All vessels over 150 gross tons, when engaged on an international voyage.

#### **Signaling Lamp**

Must be equipped with an efficient daylight-signaling lamp in accordance with the requirements of subchapter J (Electrical Engineering) of 46 CFR. 46 CFR 26.03-10

#### **VOYAGE PLANS**

#### **Applies To:**

All uninspected passenger vessels of at least 100 gross tons.

#### **Voyage Plans:**

A voyage plan must me prepared prior to an Ocean or international voyage. This plan must include a crew and passenger list.

The voyage plan must be communicated ashore, either verbally or in writing. The voyage plan must go either to the vessel's normal berthing location or to a representative of the vessel.

The voyage plan must be made available to the Coast Guard on request. 46 CFR 26.03-9

### LIFESAVING EQUIPMENT

#### **EPIRBs**

Must ensure that the vessel does not operate beyond three miles from shore unless it has onboard a float-free, automatically activated Category 1 406 MHz EPIRB stowed in a manner so that it will float free if the vessel sinks. 46 CFR 25.26-10

#### **Servicing of EPIRBs.**

The master of each vessel required to have an EPIRB shall ensure that each EPIRB on board is tested and serviced as required by this section.

The EPIRB must be tested immediately after installation and at least once each month thereafter. The test shall be conducted in accordance with the manufacturer's instructions, using the visual or audio indicator on the EPIRB. If the EPIRB is not operating, it must be repaired or replaced with an operating EPIRB.

The battery of the EPIRB must be replaced--

- ♦ Immediately after the EPIRB is used for any purpose other than being tested; and
- Before the expiration date that is marked on the battery.

#### **Registration of EPIRBs**

It is mandatory that each 406 MHz EPIRB be registered with NOAA before installation and that information be kept up-to-date. Vessel owners shall advise NOAA in writing upon change of vessel or EPIRB ownership, transfer of EPIRB to another vessel, or any other change in registration information. NOAA will provide registrants with proof of registration and change of registration postcards. *47 CFR 80.1061* 

A valid two-year Registration sticker should be on the EPIRB. Owners may register, update, or change registration at www.beaconregistration.noaa.gov.

### LIFESAVING EQUIPMENT (CONTINUED)

#### **Ring Life Buoys**

Must have at least three ring life buoys. Ring life buoys must be constructed per subpart 160.050 of chapter 46 CFR. The exception is a ring life buoy that was approved prior to May 9, 1979, which may be used as long as it is in good and serviceable condition. 46 CFR 25.25-5(d)

#### **Survival Craft**

Must have adequate survival craft with enough capacity for all persons aboard and must meet one of the following requirements: 46 CFR 25.25-17

- ◆ An inflatable liferaft, approved under;
  - 46 CFR 160.151 (SOLAS A or SOLAS B) or
  - 46 CRF 160.051-35(b)(2) A or B Liferaft (capacity less than 6 people)) or Costal Service Liferaft.

OR

♦ An inflatable buoyant apparatus approved under 46 CFR 160.010.

OR

♦ If the vessel carries a small boat or boats, the capacity of the small boat or boats may be counted toward the survival craft capacity required by this part. Such small boats must meet the requirements for safe loading and floatation in 33 CFR 183.

An inflatable liferaft or buoyant apparatus must be serviced at a servicing facility every 12 months. 46 CFR 160.151-57(n)

### LIFESAVING EQUIPMENT (CONTINUED)

#### **Storage of Survival Craft**

General. Each survival craft must be stowed--

- As close to the accommodation and service spaces as possible;
- So that neither the survival craft nor its stowage arrangements will interfere with the embarkation and operation of any other survival craft or rescue boat at any other launching station;
- As near the water surface as is safe and practicable;
- Except for liferafts intended for throw-overboard launching, not less than 2 meters above the waterline with the vessel-
  - o In the fully loaded condition;
  - o Under unfavorable conditions of trim; and
  - o Listed up to 20 degrees either way, or to the angle at which the vessel's weather deck edge becomes submerged, whichever is less.
- ◆ Sufficiently ready for use so that two-crew members can complete preparations for embarkation and launching in less than 5 minutes;
- In a secure and sheltered position and protected from damage by fire and explosion, as far as practicable; and
- So as not to require lifting from its stowed position in order to launch, except that-
- ◆ A davit-launched liferaft may be lifted by a manually powered winch from its stowed position to its embarkation position; or
- ♦ A survival craft that weights 185 kilograms (407.8 pounds) or less may be lifted not more than 300 millimeters (1 foot) in order to launch.

Additional **lifeboat** stowage requirements. In addition to the requirements above, each lifeboat must be stowed as follows:

◆ Each lifeboat for lowering down the side of the vessel must be stowed as far forward of the vessel's propeller as practicable. Each lifeboat, in its stowed position, must be

### LIFESAVING EQUIPMENT (CONTINUED)

#### **Storage of Survival Craft (Continued)**

- protected from damage by heavy seas.
- Each lifeboat must be stowed attached to its launching appliance.
- Each lifeboat must have a means for recharging the lifeboat batteries from the vessel's power supply at a supply voltage not exceeding 50 volts.

Additional **liferaft** stowage requirements. In addition to the requirements above, each liferaft must be stowed as follows:

- ◆ Each liferaft must be stowed to permit manual release from its securing arrangements.
- ◆ Each liferaft must be stowed at a height above the waterline not greater than the maximum stowage height indicated on the liferaft container with the vessel in its lightest seagoing condition. Each liferaft without an indicated maximum stowage height must be stowed not more than 18 meters (59 feet) above the waterline with the vessel in its lightest seagoing condition.
- ◆ Each liferaft must be arranged to permit it to drop into the water from the deck on which it is stowed. A liferaft stowage arrangements meets this requirement if it-
  - o Is outboard of the rail or bulwark;
  - o Is on stanchions or on a platform adjacent to the rail or bulwark; or
  - Has a gate or other suitable opening large enough to allow the liferaft to be pushed directly overboard and, if the liferaft is intended to be available for use on either side of the vessel, such gate or opening is provided on each side of the vessel.
- ♦ Each davit-launched liferaft must be stowed within reach of its lifting hook, unless some means of transfer is provided that is not rendered inoperable--
  - Within the limits of trim and list specified above;
  - o By vessel motion; or
  - o By power failure.
- Each rigid container for an inflatable liferaft to be launched by a launching appliance must be secured so that the container or parts of it do not fall into the water during and after inflation and launching of the contained liferaft.

### LIFESAVING EQUIPMENT (CONTINUED)

#### **Storage of Survival Craft (Continued)**

- Each liferaft must have a painter system providing a connection between the vessel and the liferaft.
- ◆ Each liferaft or group of liferafts must be arranged for float-free launching. The arrangement must ensure that the liferaft or liferafts, when released and inflated, are not dragged under by the sinking vessel. 46 CFR 199.130

Each hydrostatic release unit used in a float-free arrangement must be CG approved and serviced annually or in the case of disposable hydrostatic release replaced two years from the date placed in service. 46 CFR 160.062

#### Marking of stowage locations.

Containers, brackets, racks, and other similar stowage location for lifesaving equipment must be marked with symbols in accordance with IMO Resolution A.760 (18) indicating the device stowed in that location.

If more than one device is stowed in a location, the number of devices stowed must be indicated.

Survival craft should be numbered consecutively starting from the vessel's bow. Survival craft on the starboard side should be numbered with odd numerals and survival craft on the port side should be numbered with even numerals.

Each liferaft stowage location should be marked with the capacity of the liferaft stowed there.

46 CFR 199.178

#### MARKINGS FOR LIFESAVING APPLIANCES

### Operating instructions.

Each vessel must have posters or signs displayed in the vicinity of each survival craft and the survival craft's launching controls that--

- ♦ Illustrate the purpose of controls;
- Illustrate the procedures for operating the launching device;
- ♦ Give relevant instructions or warnings;
- Can be easily seen under emergency lighting conditions; and
- ◆ Display symbols in accordance with IMO Resolution A.760(18).

46 CFR 199.90

## FIRE FIGHTING EQUIPMENT

#### **Fire Extinguishers**

Must carry and install onboard hand-portable and semi-portable fire extinguishers per Table 76.50-10(a) in 46 CFR 76.50-10.

- ♦ The location of the equipment shall be to the satisfaction of the Officer in Charge, Marine Inspection. Nothing in this paragraph shall be construed as limiting the Officer in Charge, Marine Inspection, from requiring such additional equipment, as he deems necessary for the proper protection of the vessel.
- ♦ Semi portable fire extinguishing systems shall be located in the open so as to be readily seen.
- ♦ If hand portable fire extinguishers are not located in the open or behind glass so that they may be readily seen, they may be placed in enclosures together with the fire hose, provided such enclosures are marked as required by 46 CFR 78.47-20.
- ♦ Hand portable fire extinguishers and their stations shall be numbered in accordance with 46 CFR 78.47-20.
- ◆ Hand portable or semi portable extinguishers, which are required on their nameplates to be protected from freezing, shall not be located where freezing temperatures may be expected.

46 CFR 25.30-20.

# FIRE FIGHTING EQUIPMENT (CONTINUED)

<b>Table 76.50-10</b>	)(a)
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	20010 : 010 0 20(u)		
S	Hand portable fire extinguisher and semi portable fire extinguishing systems		
Space		Quantity and location	
Safety area \1\			
Wheelhouse or fire control room	A-II, B-II, C-II	1 of each classification on vessels over 1,000 gross tons. (Not required in both spaces.) (Multiple classifications may be recognized.)	
Stairway and elevator enclo	sures	None required.	
Communicating corridors	A-II	1 in each main corridor in each main vertical zone. (May be located in stairway enclosures.)	
Lifeboat embarkation and lowering stations.		None required.	
Radio room	C-I \3\	2 in vicinity of exit.\2\	
Accommodations \	1\		
Staterooms, toilet spaces, is pantries, etc	olated	None required.	
Offices, lockers, and isolated storerooms		None required.	

### FIRE FIGHTING EQUIPMENT (CONTINUED)

Public spaces A-II 1 for each 2,500 square feet or fraction

thereof located in vicinity of exits, except that none required for spaces

under 500 square feet.

Open decks or enclosed promenades None required.

**Service spaces** 

Galleys B-II or C-II 1 for each 2,500 square feet or fraction

thereof suitable for hazards involved.

Main pantries. A-II 1 for each 2,500 square feet or fraction

thereof located in vicinity of exits.

Motion picture booths

and film lockers

C-I \3\

1 outside in vicinity of exit.

Paint and lamp rooms B-II. 1 outside space in vicinity of exit.

Inaccessible baggage, mail,

and specie rooms, and storerooms.

None required.

Accessible baggage, mail,

and specie rooms, and

storerooms.

A-II

1 for each 2,500 square feet or fraction thereof located in vicinity of exits, either inside or outside the spaces.

Refrigerated storerooms A-II 1 for each 2,500 square feet or fraction

thereof located in vicinity of exits,

outside the spaces.

Carpenter, valet, A-II

photographic, printing shops sales rooms, etc.

1 outside the space in vicinity of exit.

### FIRE FIGHTING EQUIPMENT (CONTINUED)

#### **Machinery spaces**

Coal Fired Boilers: Bunker and None required.

boiler space.

Oil Fired Boilers: Spaces, B-II, B-V 2 required.\3\1 required.\4\

fired boilers, either main or auxiliary,

or their fuel oil units.

Internal combustion or gas B-II 1 for each 1,000 B. H. P., but not

turbine propelling machinery spaces. less than 2 or more than 6.

B-III 1 required.\5\

Electric propulsive motors C-II 1 for each propulsion motor or unit.

generator or generators of open type.

Enclosed ventilating systems None required.

for motors and generators of electric propelling machinery.

Auxiliary spaces, internal B-II 1 outside the space in vicinity of

combustion or gas turbine. exit.\6\

Auxiliary spaces, electric C-II. 1 outside the space in vicinity of

emergency motors or generators. exit.\6\

Auxiliary spaces, steam None required.

Trunks to emergency o machinery spaces

None required.

Fuel tank. None required.

### FIRE FIGHTING EQUIPMENT (CONTINUED)

#### Cargo spaces

Inaccessible during voyage, including trunks (excluding tanks).	ng	None required.
Accessible during voyage	A-II	1 for each 1,200 square feet or fraction thereof.
Vehicular spaces (covered by sprinkler system).	B-II	1, plus 1 for each 6,000 square feet or fraction thereof:
Vehicular spaces (not covered by sprinkler system).	B-II	1, plus 1 for each 1,500 square feet or fraction thereof. $\$
Cargo oil tanks		None required.

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<sup>\1\</sup> In any case, on vessels of 150 feet in length, and over, there shall be at least 2 A-II units on each passenger deck.

<sup>\2\</sup> For vessels on an international voyage, substitute 1 C-II in vicinity of exit.

<sup>\3\</sup> Vessels of less than 1,000 gross tons and not on an international voyage, require 1.

 $<sup>\4\</sup>$  Vessels of less than 1,000 gross tons and not on an international voyage may substitute 1 B-IV.

<sup>\5\</sup> If oil burning donkey boiler fitted in space, the B-V previously required for the protection of the boiler room may be substituted. Not required on vessels of less than 300 gross tons if fuel has flashpoint of 110 <deg>F. or lower except those on an international voyage.

<sup>\6\</sup> Not required on vessels of less than 300 gross tons if fuel has flashpoint higher than 110 <deg>F.

<sup>\7\</sup> B-I units may be substituted for 1 B-II unit.

#### **MEANS OF ESCAPE**

Except as otherwise provided in this section, each space accessible to passengers or used by the crew on a regular basis, must have at least two **means** of **escape**, one of which must not be a watertight door.

The two required **means** of **escape** must be widely separated and, if possible, at opposite ends or sides of the space to minimize the possibility of one incident blocking both escapes.

Subject to the restrictions of this section, **means** of **escape** may include normal exits and emergency exits, passageways, stairways, ladders, deck scuttles, and windows.

The number and dimensions of the **means** of **escape** from each space must be sufficient for rapid evacuation in an emergency for the number of persons served. In determining the number of persons served, a space must be considered to contain at least the number of persons as follows:

- Passenger overnight accommodation spaces: Designed capacity;
- ◆ Accommodation spaces having fixed seating for passengers: Maximum seating capacity;
- ◆ Public spaces, including spaces such as casinos, restaurants, clubrooms, and cinemas, and public accommodation spaces as defined in 46 CFR 175.400. One person may be permitted for each 0.9 square meters (10 square feet) of deck area. In computing such deck area, the following areas must be excluded:
  - Areas for which the number of persons permitted is determined using the fixed seating criterion;
  - Obstructions, including stairway and elevator enclosures, elevated stages, bars, and cashier stands, but not including slot machines, tables, or other room furnishings;
  - o Toilets and washrooms;
  - o Interior passageways less than 860 millimeters (34 inches) wide and passageways on open deck less than 710 millimeters (28 inches) wide;

### MEANS OF ESCAPE (CONTINUED)

- Spaces necessary for handling lifesaving equipment, anchor handling equipment, or line handling gear, or in way of sail booms or running rigging; and
- Bow pulpits, swimming platforms, and areas that do not have a solid deck, such as netting on multi hull vessels;
- Crew overnight accommodation spaces: Two-thirds designed capacity; and
- Work spaces: Occupancy under normal operating conditions.

The dimensions of a **means** of **escape** must be such as to allow easy movement of persons when wearing life jackets. There must be no protrusions in **means** of **escape** that could cause injury, ensnare clothing, or damage life jackets.

The minimum clear opening of a door or passageway used as a **means** of **escape** must not be less than 810 millimeters (32 inches) in width, however, doors or passageways used solely by crew members must have a clear opening not less than 710 millimeters (28 inches). The sum of the width of all doors and passageways used as **means** of **escape** from a space must not be less than 8.4 millimeters (0.333 inches) multiplied by the number of passengers for which the space is designed.

A dead end passageway, or the equivalent, of more than 6.1 meters (20 feet) in length is prohibited.

Each door, hatch, or scuttle, used as a **means** of **escape**, must be capable of being opened by one person, from either side, in both light and dark conditions. The method of opening a **means** of **escape** must be obvious, rapid, and of adequate strength. Handles and securing devices must be permanently installed and not capable of being easily removed. A door, hatch or scuttle must open towards the expected direction of **escape** from the space served.

A **means** of **escape** which is not readily apparent to a person from both inside and outside the space must be adequately marked in accordance with 46 CFR 185.606.

A ladder leading to a deck scuttle may not be used as a **means** of **escape** except:

### MEANS OF ESCAPE (CONTINUED)

- ◆ On a vessel of not more than 19.8 meters (65 feet) in length, a vertical ladder and a deck scuttle may be used as not more than one of the **means** of **escape** from passenger accommodation space; or
- ◆ As not more than one of the **means** of **escape** from any crew accommodation space or work space.

Each ladder used as a **means** of **escape** must be mounted at least 180 millimeters (7 inches) from the nearest permanent object in back of the ladder. Rungs must be:

- ♦ At least 405 millimeters (16 inches) in width; and
- ♦ Not more than 305 millimeters (12 inches) apart, and uniformly spaced for the length of the ladder with at least 114 millimeters (4.5 inches) clearance above each rung.

When a deck scuttle serves as a **means** of **escape**, it must not be less than 455 millimeters (18 inches) in diameter and must be fitted with a quick acting release and a holdback device to hold the scuttle in an open position.

Footholds, handholds, ladders, and similar **means** provided to aid **escape**, must be suitable for use in emergency conditions, of rigid construction, and permanently fixed in position, unless they can be folded, yet brought into immediate service in an emergency.

On a vessel of not more than 19.8 meters (65 feet) in length, a window or windshield of sufficient size and proper accessibility may be used as one of the required **means** of **escape** from an enclosed space, provided it:

- ◆ Does not lead directly overboard;
- Can be opened or is designed to be kicked or pushed out; and
- ♦ Is suitably marked.

### MEANS OF ESCAPE (CONTINUED)

Only one **means** of **escape** is required from a space where:

- The space has a deck area less than 30 square meters (322 square feet);
- There is no stove, heater, or other source of fire in the space;
- ◆ The **means** of **escape** is located as far as possible from a machinery space or fuel tank; and
- ◆ If an accommodation space, the single **means** of **escape** does not include a deck scuttle or a ladder.

Alternative **means** of **escape** from spaces may be provided if acceptable to the cognizant OCMI. 46 CFR 177.500 (o) & (p)

#### **EXIT SIGNS.**

Illuminated **exit signs** are required and must be installed in accordance with 46 CFR Subchapter J (Electrical Engineering Regulations).

Small rooms or spaces having a secondary means of escape which is not obviously apparent shall have a suitable sign in red letters "EMERGENCY **EXIT**" directing attention to such escape. *46 CFR 78.47-40* 

### Pumping, piping and discharge requirements

All oceangoing UPVs over 100 GTs, that has main or auxiliary machinery spaces, must have:

At least one pump installed to discharge oily mixtures through a fixed piping system to a reception facility;

- The piping system must have at least one outlet accessible from the weather deck;
- For a ship on an international voyage, the outlet has a shore connection that meets the specifications in 33 CFR 155.430 and fits the required outlets.
- For a ship on an international voyage, the outlet required by this section has shore connection that is compatible with reception facilities in the ship's area of operation.
- ♦ The ship has a means on the weather deck near the discharge outlet to stop each pump that is used to discharge oily mixtures; and
- The ship must have a stop valve installed for each outlet.

This section does not apply to ship that has approved oily-water separating equipment for the processing of oily mixtures from bilges or fuel oil tank ballast.

33 CFR 155.420

#### **ENGINEERING**

An examination of each vessel's engineering equipment and systems should be made to determine its general condition. Electrical installations shall be as such to prevent shock or fire hazards. The installation should be examined for inadequate connections, loose or frayed wiring, improper over current protection, proper grounding, etc. Main engine and auxiliaries should be examined to determine if any immediate hazards exist. Excessive fuel or oil leaks, exhaust leakage, or other especially hazardous conditions should be corrected. The pressure vessel requirements in 46 CFR Subpart 182.330 apply. ASME standard boiler and pressure vessels may be accepted as equivalents. The steering apparatus requirements in 46 CFR Subpart 182.600 apply. The miscellaneous requirements in 46 CFR Subpart 184 apply. *NVIC 7-94* 

### **HAZARDOUS CONDITIONS**

Especially hazardous conditions that pose an immediate danger to the passengers or crew shall be corrected immediately. These include any hazardous conditions involving the vessel structure, electrical system, and machinery installation, such as grossly inadequate, missing, unsound, or severely deteriorated frames or major structural members; wiring systems without proper grounding or over current protection; and significant fuel or exhaust system leaks. Items that are of less significance can be placed on a work list with a time line for completion mutually agreed upon by the vessel owner and the OCMI. Particular attention should be paid to the following systems: vessel's structure, electrical system, and machinery installations. Corrections of a hazardous condition shall be made using good marine practice. *NVIC* 7-94

Addendum to LANT/PACAREAINST 16710.2 Enclosure (1)
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